

REMARKS

The application has been carefully reviewed in light of the Office Action dated August 28, 2002. Claims 3-5, 24-26, 30-32, 34-36, 41-43 and 50 have been canceled without prejudice. Claims 1, 2, 6-16, 18-23, 27-29, 33, 37-40, 44-49 and 51 have been amended. Claims 1, 2, 6-23, 27-29, 33, 37-40, 44-49 and 51 remain pending in this case.

The claims stand generally rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Certain claims have been amended in response to this rejection. Applicants respectfully submit that all claims are now in compliance with § 112.

Claims 1, 6, 7, 22, 27, 28, 33 and 51 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lipps et al. (U.S. Patent No. 5,741,182). Applicants respectfully traverse the rejection and request reconsideration.

Amended claims 1, 6, 28, 33 and 51 recite a position detector detecting “a spatial position” of an object (e.g., a light emitter, a light detector an operation device, operating means, etc.) “at each of a plurality of positions as it moves through a defined spatial area.” [Emphasis added].

Lipps, to the contrary, discloses merely the detection of whether a bat 46 passes through a specific point above home plate 40 to detect a timing of the player’s swinging of the bat 46. If the bat 46 is not positioned at or around the one point of detection, the timing of the player’s swinging of the bat 46 cannot be detected.

According to Lipps, “typically, the player stands with the simulated bat as he watches the action in the baseball video game. At the appropriate time, the player stands with the simulated bat preparing to swing. As the player watches the pitcher in the video game deliver a pitch, the player times the speed and estimates whether the pitch will arrive

in the strike zone, and thus be ‘hitable.’ If the player expects the ball to be hitable, he swings the bat to meet the timing of the pitch.” Lipps at column 3, lines 6-12.

Lipps also describes an embodiment in which an infrared motion sensor senses the timing of the player’s swinging of the bat. Lipps at column 3, lines 31-41.

The detection of the timing of a player’s swinging of a bat, as disclosed in Lipps differs greatly from the detection of a spatial position, as defined by claims 1, 2, 6 and 51. For example, in the infrared embodiment disclosed in Lipps, the detector can detect the speed of the bat only when the bat has passed through an emission path of the infrared signal.

That, is, Lipps cannot detect a spatial position of the bat at each of a plurality of positions as it moves through a defined spatial area, but rather, Lipps can only detect the timing of the bat swing based on the timing of the bat entering the path of the infrared light emission. Therefore, rather than detecting a spatial position of the bat at each of a plurality of positions, Lipps is capable of detecting only when the bat is the infrared path. At least for these reasons, claims 1, 2, 6 and 51 are not anticipated by Lipps.

Claims 7, 22 and 27 depend from claims 1 and 6 and are allowable over Lipps at least for the reasons mentioned above and also because Lipps does not teach or suggest their respective inventive combinations.

Claims 44-49 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Suzuki et al. (U.S. Patent No. 6,227,969). Applicants respectfully traverse the rejection and request reconsideration.

Claims 44-49 recite “an operation device operated by said game player” where the game player is instructed as to the movement of the operation device. Suzuki does not

disclose, and the Office Action fails to address, this limitation of claims 44-49. At least for this reason, claims 44-49 are not anticipated by Suzuki.

Claims 2, 8-16, 18-20, 23, 29, 37-40 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lipps or the combination of Lipps and Suzuki. Applicants respectfully traverse the rejection and request reconsideration.

Claims 2 and 29 recite a detector detecting light emitted from “a light emitter” and “detecting a spatial position of a light detector at each of a plurality of positions as it moves through a defined spatial area.” [Emphasis added]. As mentioned above in connection with at least claim 1, Lipps does not disclose the recited limitation of amended claims 2 and 29. Further, Suzuki does not teach or suggest the recited limitations. Therefore, even when the references are combined, which they provide no motivation to do, they still do not disclose the invention defined by claims 2 and 29. At least for these reasons, claims 2 and 29 are allowable over Lipps and Suzuki.

As mentioned above, claim 44 recites “an operation device operated by the game player.” Neither Lipps, nor Suzuki (or a combination thereof) teach or suggest an operation device as defined by claim 44. Further, there is no motivation within either of Lipps or Suzuki to combine their respective teachings as the Office Action suggests. Such motivation is required for a *prima facie* rejection under § 103. Applicants respectfully submit that the Examiner has not met this burden based on Lipps and Suzuki.

Claims 8-16, 18-20, 23, 29 and 37-40 depend either directly or indirectly from claims 1, 2 and/or 6, all of which are described above. At least for the reasons mentioned above, claims 8-16, 18-20, 23, 29 and 37-40 are allowable and also because neither Lipps nor Suzuki teach or suggest their respective inventive combinations.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue.

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Respectfully submitted,

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Version With Markings To Show Changes Made

1. (Amended) A game apparatus operated by motions of a game player opposed to a display screen, comprising:

 a light emitter operated by the game player and emitting light;

 a position detector detecting light from the light emitter to detect a spatial position of the light emitter at each of a plurality of positions as it moves through a defined spatial area; and

 a control unit controlling a game, based on the spatial position detected by the position detector.

2. (Amended) A game apparatus operated by motions of a game players opposed to a display screen, comprising:

 a light emitter disposed at a prescribed position and emitting light;

 a light detector operated by the game player and detecting light;

 a position detector detecting light from the light emitter to detect a spatial position of the light detector at each of a plurality of positions as it moves through a defined spatial area; and

 a control unit controlling the game, based on the spatial position detected by the position detector.

6. (Amended) A game apparatus operated by motions of a game [players] player opposed to a display screen, comprising:

an operation device including an operation unit operated by the game player connected by a flexible cable to a signal unit transmitting or receiving a position signal;

a position detector receiving or transmitting the position signal from or to a signal unit of the operation device to detect a spatial position of the operation device at each of a plurality of positions as it moves through a defined spatial area [, based on the spatial position]; and

a control unit controlling a game, based on the spatial position detected by the position detector.

7. (Amended) A game apparatus according to any one of claims 1 [to], 2 or 6, wherein

a command display commanding a prescribed operation to the game player is presented on the display screen; and

the control unit judges whether or not the game player has operated in accordance with the prescribed operation commanded by the command display, and controls the game, based on a judgement result.

8. (Amended) A game apparatus according to claim 7, wherein

on the display screen, a plurality of [indicative] positions to which the game player can [indicate] respond are displayed, and a command mark [is blown out] appears at a preset [blowout] appearance position and moved to one of said plurality of [indicative] positions; and

the control unit judges at a timing that the command mark arrives at said one of the [indicative] positions whether or not the game player has [indicated] responded to said one of the [indicative] positions.

9. (Amended) A game apparatus according to claim 8, wherein
the command mark contains a command of a specific operation;
the control unit judges at a timing that the command mark arrives at said one of
the [indicative] positions whether or not the game player has [made the specific operation]
responded as commanded.

10. (Amended) A game apparatus according to claim 8, wherein
the light emitter is provided on the operation device operated by the game player
in the hand;
said plurality of [indicative] positions are displayed at locations where the game
player can operate the control unit with himself positioned at the center.

11. (Amended) A game apparatus according to claim 9, wherein
the light emitter is provided on the operation device operated by the game player
in the hand;
said plurality of [indicative] positions are displayed at locations where the game
player can operate the control unit with himself positioned at the center.

12. (Amended) A game apparatus according to claim 8, wherein
the light emitter is put on a part of the body of the game player; and
said plurality of [indicative] positions are displayed at locations where the game
player can operate the control unit with himself at the center.

13. (Amended) A game apparatus according to claim 9, wherein

the light emitter is put on a part of the body of the game player; and
said plurality of [indicative] positions are displayed at locations where the game
player can operate the control unit with himself at the center.

14. (Amended) A game apparatus according to claim 10, wherein
the operation device has a shape of a percussion musical instrument which is
operated, gripped in the hand, and further comprises a vibration detector detecting a
vibrated state of the operation device; and

the control unit controls the game in accordance with at least one of a position
[and/or] of the operation device and the vibrated state of the operation device.

15. (Amended) A game apparatus according to claim 11, wherein
the operation device has a shape of a percussion musical instrument which is
operated, gripped in the hand, and further comprises a vibration detector detecting a
vibrated state of the operation device; and

the control unit controls the game in accordance with at least one of a position
[and/or] of the operation device and the vibrated state of the operation device.

16. (Amended) A game apparatus according to claim 7, wherein
on the display screen, a plurality of [indicative] positions to which the game
player can indicate respond are displayed, and a command mark [is blown out] appears at
a preset [blowout] appearance position and moved to one of said plurality of [indicative]
positions; and

the control unit judges at a timing that the command mark arrives at said one of the [indicative] positions whether or not the game player has [indicated] responded to said one of the [indicative] positions, and a judgement result is displayed near the position of the [blowout] appearance position.

18. (Amended) A game apparatus according to claim 7, wherein

a plurality of [indicative] positions to which the game player can [indicate] respond are displayed on the display screen; and

the control unit [allocate] allocates operation sound to said plurality of [indicative] positions, [and when the game player operates, the operation sounds which are different corresponding to said plurality of indicative positions are generated] wherein the operation sound is different for each position.

19. (Amended) A game apparatus according to claim 7, wherein

a plurality of [indicative] positions to which the game player can [indicate] respond are displayed on the display screen; and

the control unit temporarily prohibits [a] an operation of [indicating] responding to one selected [out of said plurality of indicative positions] position, and displays that responding to the [indicative] one selected position is prohibited.

20. (Amended) A game apparatus according to claim 1, wherein

the light emitter is provided in an operation device operated by the game player in the hand or on a part of the body of the game player;

the position detector detects based on the detected spatial position of the light emitter whether or not the game player has [take] taken a specific pose and retained the pose for a prescribed period of time; and

the control unit controls the game, based on a detected result of the pose.

21. (Amended) A game apparatus according to claim 8, wherein

said plurality of [indicative] positions are different from each other corresponding to a height of the game player.

22. (Amended) [Input] An input device used in a game apparatus according to claim 1,

the input device being operated by a game player and including a light emitter which lights.

23. (Amended) [Input] An input device used in a game apparatus according to claim 2,

the input device being operated by a game player and including a light emitter which lights.

27. (Amended) [Input] An input device used in a game apparatus according to claim 6,

the input device being operated by a game player and including a light emitter which lights.

28. (Amended) A game method [to be executed on the game apparatus according to claim 1], the method comprising:

emitting light with a light emitter operated by a game player;

detecting said light at a position detector to detect a spatial position of said light emitter at each of a plurality of positions as it moves through a defined spatial area; and

controlling the game based on the detected spatial position.

29. (Amended) A game method [to be executed on the game apparatus according to claim 2], the method comprising:

emitting light with a light emitter disposed at a prescribed position;

detecting said light with a light detector operated by a game player;

detecting a spatial position of said light detector at each of a plurality of positions as it moves through a defined spatial area; and

controlling the game based on the detected spatial position.

33. (Amended) A game method [to be executed on the game apparatus according to claim 6], the method comprising:

transmitting/receiving a position signal from an operation device including an operation unit operated by a game player;

receiving/transmitting the position signal from or to a signal unit of the operation device;

detecting a spatial position of the operation device at each of a plurality of positions as it moves through a defined spatial area; and

controlling the game based on the detected spatial position.

37. (Amended) A game apparatus according to claim 7, wherein

the operation device is operated by a game player, is held in the game player's hand, and has a shape like a percussion musical instrument, and

the operation device includes a hit detector detecting the game player's hitting the operation device.

38. (Amended) A game apparatus according to claim 7, wherein

a plurality of [indicative] positions to which the game player can [indicate] respond is displayed on the display screen; and

the control unit displays to which one of said plurality of [indicative] positions the operation device [indicates] corresponds.

39. (Amended) A game apparatus according to claim 7, wherein

on the display screen, a plurality of [indicative] positions to which the game player can [indicate are] respond is displayed, and a command mark [is blown out] appears at a preset [blowout position] appearance positions and moves to one of said plurality of [indicative] positions; and

the control unit judges, at a timing that the command mark arrives at said one of said [indicative] positions, whether or not the game player has [indicated] responded to said one of said [indicative position] positions, and displays a judgement result near said one of said [indicative] positions.

40. (Amended) A game apparatus according to claim 7, wherein

on the display [scree] screen, a plurality of [indicative position] positions to which the game player can [indicate are] respond is displayed, and a movement indication among plural ones [selected out of said plurality of indicative positions] of said positions is displayed; and

the control unit judges whether or not the game player has moved the operation device along the movement indication.

44. (Amended) A game apparatus operated by [a motion of] game player motion, comprising:

an operation device operated by the game player; and

a display unit displaying game displays opposed to the game player,

the display unit [blowing out] displaying at a prescribed [blow-out] appearance position on the display screen at least two command marks indicating at least two operations different from each other in accordance with a rhythm of music, and commanding [the] a prescribed position [for] to which the operation device is to be moved [to, by a blowing-out direction].

45. (Amended) A game apparatus operated by [a motion of] game player motion, comprising:

an operation device operated by the game player; and

a display unit displaying game displays opposed to the game player,

the display unit displaying a prescribed [indicative] position, and [blowing out] displaying at a prescribed [blow-out] appearance position on the display screen at least two command marks indicating at least two operations different from each other in accordance

with a rhythm of music, and indicating a [track] path from the prescribed appearance position to the prescribed [indicative] position [by a blowing-out direction thereof so that the operation device is moved to the prescribed indicative position].

46. (Amended) A game apparatus operated by [a motion of] game player motion, comprising:

an operation device operated by the game player; and

a display unit displaying game displays opposed to the game player,

the display unit displaying a plurality of [indicative] positions, displaying a plurality of different command marks [of a plurality kinds] at a prescribed [blow-out] appearance position on the game screen moving, in accordance with a rhythm of music, along a [track] path to one of said plurality of [indicative] positions, such that

when the command marks arrive at [the] a selected [indicative] position, the game player [making motions of the kinds] moves as commanded by the command marks.

47. (Amended) A method for [presenting displays of] displaying a game operated by [a motion of a] game player [opposed to a display screen,] motion, the method comprising:

displaying on a display screen visible to said game player a plurality of command marks [for the game player being displayed on the display screen so as to be blown out one by one] corresponding to movement of an operation device controlled by said game player, said command marks being displayed one by one from an initial display position in accordance with a rhythm of music [at a prescribed blow-out position],

the command marks containing at least two operational commands different from each other, and [a blowing-out] an initial appearance direction thereof indicating a command of moving an operation device to a prescribed position.

48. (Amended) A method for [presenting displays of] displaying a game operated by [a motion of a] game player [opposed to a display screen,] motion, the method comprising:

displaying on a display device a prescribed [indicative] position [being displayed on the display screen,]

displaying at a prescribed initial display position on said display device a plurality of command marks [for the game players being displayed so as to be blow out at a prescribed blow-out] corresponding to movement of an operation device operated by said game player, said command marks initiating at said prescribed initial display position in accordance with rhythm of music and moved along a track to the prescribed [indicative] position,

the command marks containing at least two or more operational commands different from each other, the movement track commands movement of an operation device to the prescribed [indicative] position.

49. (Amended) A method for [presenting displays of] displaying a game operated by [a motion of a] game player [opposed to a display screen,] motion, the method comprising:

displaying on a display screen a plurality of [indicative] positions [being displayed on the display screen] corresponding to possible positions of an operation device operated by said game player,

displaying a plurality of different command marks [of a plurality of kinds for the game player being blow out] at a prescribed [blow-out] initial appearance position in accordance with a rhythm of music [and], said plurality of command marks being moved along [a track] respective paths to [one] respective selected [out of said plurality of indicative] positions,

[when the command marks arrive at the selected indicative position, motions to be made by the game player being commanded by the kinds of the command marks]
commanding the game player to move in a prescribed manner in accordance with each of said command marks when said command marks arrive at said respective selected positions.

51. (Amended) A game apparatus operated by motions of a game player opposed to a display screen, comprising:

an operating means operated by the game player;

a position detector detecting a spatial position of the operating means at each of a plurality of positions as it moves through a defined spatial area; and

a control unit controlling a game, based on the spatial position detected by the position detector.